Carnegie institution of Washington. Year-book—Continued.

Livingston, B. E. Spherical porous cups for atmometry. p.

Livingston, B. E., & Sampson, H. C. Atmometric units. p. 85. Hayford, John F. Investigation of the laws of evaporation and

stream flow. p. 376-377.

Engineering news. New York. v. 73. 1915.

Fleming, R. Wind pressure formulas and their experimental basis. p. 160-163. (Jan., 28.)

Fleming, R. Wind stresses in steel mill buildings. p. 210-214.

(Feb., 4.)

Indian meteorological department. Memoirs. Calcutta. v. 22. pt. 3.

Walker, Gilbert T. Monthly and annual normals of pressure, temperature, relative humidity, vapour tension and cloud. p. 411-503.

Journal of geography. Madison. v. 13. February, 1915.
Ward, Robert DeC[ourcy]. The European winter and the war. p. 169-171.

Mctcorological society of Japan. Journal. Tokyo. 34th year. January,

Okada, T. The remarkable glazed frost of Mukden of November 2 value. London. v. 94. January 21, 1915.

Aitken, John. Feel Feel

Aitken, John. The influence of icebergs on the temperature of the sea. p. 561-562.

Davis, G. M. Curious forms of ice. p. 563.

Davison, C. The earthquake in central Italy. p. 565.

Popular science monthly. New York. v. 86. February, 1915.

Palmer, Andrew H. Popular misconceptions concerning the weather. p. 128-141.

Royal meteorological society. Quarterly journal. London. v. 41.

January, 1915.

oyal meteorological society. Quarterly journal. London. v. 41. January, 1915.

Mill, Hugh Robert. Isomeric rainfall maps of the British Isles. p. 1-44. [Includes discussion.]

Stacey, W. F. Distribution of relative humidity in England and Wales. p. 45-64. [With discussion. Includes monthly and annual charts.]

Horton, Percy H. Mirage on the Cornish coast. p. 71.

Shaw, W[illiam] N[apier]. Meteorological observations at Holywell, Flintshire, 1793 to 1835. p. 71-73.

Marriott, W[illia]m. Meteorological observations at Addington, 1792-1793.

1792-1793

Shaw, William Napier. Publication of values of rainfall in millimetres. p. 75-76.

Royal society. Philosophical transactions. London. ser. A. v. 214.

A 520. 1914.

King, Louis Vessot. On the convection of heat from small cylinders in a stream of fluid: Determination of the convection constants of small platinum wires with applications to hot-wire

stants of smail platinum were with applications to instante anemometry. p. 375-432.

Science. New York. v. 41. February 12, 1915.

Arctowski, Henryk. A study of the influence of volcanic dust veils on climatic variations. p. 252-255.

Scientific American supplement. New York. v. 79. February 6, 1915.

Moreux, Th[cophile]. Protection from earthquakes. Principles of location and methods of construction found desirable. p. 90-91.

Symons's meteorological magazine. Lendon, v. 49. January, 1915 Bonacina, L. C. W. What do we mean by the seasons? p. 207-

Sedgwick, Walter. Weather in the seventeenth century. p. 209-213

Académie des sciences. Comptes rendus. Paris. tome 160. 11 janvier

Cabannes, J. Sur la diffusion de la lumière par l'air. p. 62-63.

Boutaric, A. Sur la polarisation et le pouvoir absorbant de l'atmosphère. p. 75-80.

Annalen der Hydrographie und maritimen Meteorologie. Berlin. 43.

Jahrgang. Heft 1. 1915.

Reinicke, G. Das Barozyklonometer. p. 19-23.

Thraen, A[ugust]. Ist die deutsche Seeküste ein einheitliches Niederschlagsgebiet? p. 24-31.

Himmel und Erde. Berlin. Jahrgang 26. Dezember 1914.

Hoerner, G. Donner und Blitz im altbayerischen Volksglauben.

Himmel und Erde. Berlin. Jahrgang 26. Dezember 1914.

Hoerner, G. Donner und Blitz im altbayerischen Volksglauben. p. 565-567

Metcorologische Zeitschrift. Braunschweig. Band 31. Dezember 1914.

Hann, J[ulius] v. Zum Klima von Abessinien, Addis Abeba.
p. 561-566.

Sresnewsky, A. Eine Lösung des Problems der Korrelation zwischen zwei Veränderlichen, und über die Methode der gleichen Häufigkeiten. p. 566-572.

Meteorologische Zeitschrift. Braunschweig-Continued. Staikoff, St. D. Die Fehlerrechnung in der Klimatologie. p. 573-579

Schmidt, Ad. Friedrich Bidlingmaier. p. 579-580. [Obituary.] Giacomelli, R. Eine neue Probe für die Richtigkeit der Differen-

zenmethode in der Ableitung von Mittelwerten aus Pilotvisier-ungen ungleicher Höhe. p. 584.

Naturwissenschaften. Berlin. 2. Jahrgang. 4. Dezember 1914.

Schmidt, Wilhelm. Das Wesen des Donners. p. 1021-1023.

Oesterreichische Flug-Zeitschrift. Wien. 8. Jahrgang. 31. Dezember 1914. Hörbiger, H. Glacialkosmogonische Beiträge zur Physik der Atmosphäre und der Sonne. p. 396-400.

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By C. Fitzhugh Talman, Professor in charge of Library.

[Dated, Washington, Mar. 1, 1915.]

INDIAN SUMMER.

In nearly everything that has heretofore been written concerning the expression "Indian summer" it is taken for granted that the term "Indian" used in this connection has reference to the North American Indians. In his memoir published in the Monthly Weather Review of January and February, 1902, Mr. Albert Matthews quotes some letters of Horace Walpole in which certain unusually hot summers in India are described as "Indian," obviously in allusion to the hot climate of India, or possibly the "Indies" in general; but these quotations probably have no bearing on the history of the term "Indian summer" as now commonly used in America. Somewhat more pertinent is the suggestion of Prof. Abbe 1 that "some early traveler who had been in India and had experienced the dry, hazy weather of the dusty Indian plains recognized the same kind of sky in our Indian summer haze."

Mr. Horace Ware, of Boston, has recently called the writer's attention to the fact that the term "Indian summer' is applied in the British Board of Trade regulations to the season of fine weather over the waters adjacent to British India, and that the abbreviation "I.S.," meaning Indian summer, is used in marking one of the maximum load lines on British ships. The regulations under the merchant shipping act of 1894, adopted January 12, 1899, contain the following provisions as to marking load lines:

3. Such maximum load lines shall be as follows, and the upper edge of such lines shall respectively indicate:

For fresh water: The maximum depth to which the vessel can be loaded in fresh water.

For Indian summer: The maximum depth to which the vessel can be loaded for voyages during the fine season in the Indian seas, between the limits of Suez and Singapore.

For summer: The maximum depth to which the vessel can be loaded for voyages (other than Indian summer voyages) from European and Mediterranean ports between the months of April and September, both inclusive, and as to voyages in other parts of the world (other than Inclusive, and as to voyages in other parts of the world total than Indian summer voyages) the maximum depth to which the vessel can be loaded during the corresponding or recognized summer months.

For winter: The maximum depth to which the vessel can be loaded for voyages (other than Indian summer voyages and summer voyages).

from European and Mediterranean ports between the months of October and March, both inclusive, and as to voyages in other parts of the world the maximum depth to which the vessel can be loaded during the corresponding or recognized winter months.

For winter (North Atlantic): The maximum depth to which the vessel can be loaded for voyages to or from the Mediterranean or any European port, from or to ports in British North America or eastern ports in the United States, north of Cape Hatteras, between the months of October and March, both inclusive.

MONTHLY WEATHER REVIEW, Feb., 1902, 30: 79, footnote 142.
 Robt, Temperley. "The Merchant Shipping Acts." London, 1907, pp. 710-711.

Such maximum load lines shall be distinguished by initial letters conspicuously marked opposite such horizontal lines as aforesaid, such initial letters being as follows:

F. W.—Fresh water. I. S.—Indian summer.

S.—Summer. W.—Winter.

W. N. A.-Winter, North Atlantic.

The season of fine weather in the Indian seas (i. e., the Arabian Sea, the Bay of Bengal, and adjacent waters) is the period from November to March, inclusive, when the northeast monsoon prevails, or more especially the months January-March, inclusive, when these seas are entirely free from tropical cyclones. Astronomically, this season is "winter" rather than "summer." It is, however, the dry season, and it is not uncommon in tropical countries to identify the dry season with summer and the rainy season with winter. This custom is especially common

in Spanish-speaking tropical countries, where the dry season is commonly called "verano" (summer) and the wet season "invierno" (winter), regardless of the ordinary calendar. However, the present writer is not familiar with this use of the terms "summer" and "winter" in literature relating to or emanating from India. Certainly the "winter" of guidebook and travel literature concerning India is the cold season, i. e., January and February.

We should be glad to obtain information as to the history of the term "Indian summer" as applied by British sailors to the season of fine weather in the Indian seas, and also as to the limits of the season thus designated. If the term was current in this sense as early as the eighteenth century, the fact may have some bearing upon the history of the term in its more familiar application to a spell of fine, tranquil weather in autumn, though this does not, at

present, seem likely.